

Information Item

Educational Policy and Programs Committee

Eligibility Study of the 2001 Class of Public High School Graduates for Admission to the State's Public Universities -- A Prospectus

This prospectus describes the purpose, background, and general research design issues of the Commission's current eligibility study involving the 2001 class of public high school graduates. Findings from previous eligibility studies are also summarized.

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Introduction The Commission's most recent planning documents, *A Policy for Progress: Reaffirming California Higher Education Accessibility, Affordability, and Accountability into the 21st Century* (April 2000, Commission Report 00-3) and *Providing for Progress: California Higher Education Enrollment Demand and Resources into the 21st Century* (February 2000, Commission Report 00-1), underscored the increasing importance of a well-educated populace as vital to the continued social and economic health of California. Perhaps not since the late 1950s has school reform and public accountability become so prevalent at the national, state, and local level in an effort to address student academic achievement and college preparedness. For example, the California Department of Education (CDE) used its Standardized Testing and Assessment Reporting (STAR) testing program for the first time in 1999 to derive Academic Performance Index (API) scores that were used to rank public high schools based on student achievement scores in mathematics, science, language arts, and social science.

In the future, public schools that meet or exceed performance targets may be eligible for State incentive funds, whereas schools that fail to meet annual improvements may be identified for immediate intervention. State-wide instructional content standards have also been adopted recently, and seniors will be required to pass a standardized high school graduation examination beginning with the class of 2004.

Since 1960, the California Legislature has requested the California Postsecondary Education Commission to conduct eligibility studies, on a periodic basis, that describe and examine changes in student academic preparation for college. The current study of the 2001 class of public high school graduates will mark the first such study undertaken within this new era of expanded public accountability practices in schooling. This prospectus discusses the origin and importance of the Commission's eligibility studies and outlines the planning process that will be used to complete the 2001 study.

Although some educators have tended to focus on the percentages of high school graduates estimated to have met all admission requirements for the California State University or the University of California in a given year,

the scope of the eligibility study is much broader. It is an in-depth, comprehensive study of the academic preparation and college readiness of recent public high school graduates in relation to the current freshman admission requirements of the University of California and the California State University.

**Impetus
for the study**

The California Master Plan for High Education (1960) established a tripartite system of public postsecondary education to help the State effectively plan for and manage significant numbers of high school graduates seeking to transition to college. In doing so, it established separate missions and functions for the California Community Colleges, the State University, and the University of California. Significant among the difference in missions was the delineation of distinct pools of California's college-going population to be served by each public postsecondary system.

The community college system was designated the most open of the three systems in that all high school graduates or anyone at least 18 years of age was considered eligible to enroll at any community college. The community colleges are responsible statutorily for lower division academic instruction, occupational and vocational education, adult education, remedial and basic skills education, and avocation and community service programs. Moreover, the Master Plan explicitly regards the community college transfer function as an important facet of providing Californians with educational opportunities leading to the baccalaureate degree. In addition to making the cost of achieving a college education more affordable for many students, the transfer function also embraces the concept of a *second chance* by providing a path to baccalaureate education for many Californians who may not have qualified for admission based on their high school performance.

By contrast, students interested in continuing their education at a public university directly upon high school graduation are required to complete successfully some of the most stringent admission requirements of any public university system in the nation. Although complete specification of college admission criteria were left to the discretion of the governing boards of the California State University and the University of California, the State Master Plan recommended that the State University set its freshman admission requirements such that the top one-third (33.3%) of the public high school graduating class would be eligible. It recommended that the University of California set its admission criteria so that the top one-eighth (12.5%) of high school graduates would be eligible.

**Commission
eligibility studies**

The Commission conducts its eligibility studies in collaboration with the two public university systems, and with the cooperation of the State's public high schools and the Superintendent of Public Instruction. The information obtained provides empirically-based benchmarks for assessing freshmen admission requirements and for planning for new student demand. More specifically, eligibility studies of recent public high

school graduates remain a top priority of the Commission for four major reasons:

- ◆ The eligibility information collected is not readily available from any other source. For example, the Department of Education does not maintain a statewide database of the grade performance and course-taking patterns of public high school graduates. Furthermore, UC and CSU admission files include only the records of those students who elect to apply for admission. In contrast, each Commission eligibility study samples the records of approximately 16,000 graduates from the entire pool of public high school graduates. Therefore, the study is able to generate statistically valid generalizations with respect to the entire pool of graduating seniors.
- ◆ The study findings are necessary to help institutions and legislators frame appropriate and fair policy options for maximizing student access when faced with increasing proportions of academically-prepared high school graduates. Since 1960, both the California State University and University of California have been able to control enrollment demand somewhat by adjusting their admission requirements based in part on the results of various eligibility studies. Given recent K-12 accountability reform legislation and increased funding for student academic outreach programs, however, it is probable that college eligibility in the near future will exceed current Master Plan guidelines. Because the CSU and UC admission requirements are among the most stringent of comparable postsecondary systems, eligibility data can be used to help clarify the implications of various alternative admission policies.
- ◆ The study is able to inform educational equity practices by detecting possible differences in college preparedness and eligibility by gender, ethnic-racial group, urbanization (rural, urban, suburban) and 11 geographic planning regions
- ◆ Because the geographic regions used in the eligibility study are the same as those used in the Commission's regional enrollment model, it is possible to relate changes in regional college readiness to changes in regional enrollment demand.

Given the burgeoning elementary and secondary enrollments projected over the next 10 years, coupled with increases in the proportion of high school graduates who are expected to complete college preparatory coursework, it is evident that California's higher education enterprise will face a difficult challenge over this decade in guaranteeing educational opportunity to all prospective learners found to be eligible under present admission requirements. Academic performance data from the 2001 study, therefore, will be very useful to institutional planners and public officials in addressing the issue of student eligibility within a public ac-

countability era that accentuates high academic expectations for all school learners, regardless of socioeconomic circumstances.

Findings from previous eligibility studies

Over the past 40 years, the California Postsecondary Education Commission, and its immediate predecessor, the Coordinating Council for Higher Education, conducted seven eligibility studies. Those studies sought to determine the extent to which the percentages of recent high school graduates eligible for admission to the CSU and UC matched guidelines established by the California Master Plan.

Display 1 provides a summary of the findings from those studies. Also included in the display are the findings from the first study undertaken in 1955 by the *Committee for the Restudy of the Needs of California in Higher Education*. Note that in 1955, before the Master Plan Guidelines were adopted, 44 percent of the public high school graduates were estimated to be eligible to attend the State University, and 15 percent were eligible to attend the University of California.

DISPLAY 1 *Estimated Freshmen Eligibility Rates for the California State University and the University of California, 1955 to 1996*

<u>Responsible Agency</u>	<u>Year</u>	<u>CSU</u>	<u>UC</u>
Master Plan Guidelines	1960	33.3	12.5
Committee for the Restudy of the Needs of California in Higher Education	1955	44.0	15.0
Master Plan Survey Team	1961	43.4	14.8
Coordinating Council for Higher Education	1966	35.2	14.6
California Postsecondary Education Commission	1975	35.0	14.8
California Postsecondary Education Commission	1983	29.6	13.2
California Postsecondary Education Commission	1986	27.5	14.1
California Postsecondary Education Commission	1990	34.6	12.3
California Postsecondary Education Commission	1996	29.6	11.1

Shortly after the 1955 study, the Master Plan Survey Team, as part of its development of the 1960 Master Plan for Higher Education in California, conducted a review of higher education enrollments between 1948 and 1958. From that 10-year review, the Survey Team developed an average statewide college participation rate and applied it to the Department of Finance's projections of high school graduates through the year 1975. The projection analysis suggested that the State University and the University of California would absorb a disproportionate share of the lower-division enrollment growth over the next 15 years if current participation levels prevailed.

In the opinion of the Survey Team, an expansion of the two systems to accommodate that level of enrollment growth was not in the best interest of the State for two primary reasons: (1) the cost of building new classroom and laboratory facilities would be exorbitant, and, (2) excessive growth in lower-division enrollments at these two systems might interfere with the two system's ability to meet upper-division and graduate level instructional responsibilities. The Survey Team, therefore, proposed that the percent of eligible public high school graduates be reduced to the top one-third for the State University and be reduced to the top one-eighth for the University of California -- guidelines that continue to be in effect today. The Commissions 1996 study, the latest undertaken, found that about 11.1 percent of the public high school graduating seniors were eligible to attend the University of California, while about 29.6 percent of the graduates were estimated to be eligible to attend the State University.

The Commission's 1983 study was the first to derive eligibility estimates by gender, ethnic-racial group (Asian, African American, Latino, White), and geographic region. Display 2 provides a summary of the estimated eligibility rates by ethnic-racial group for the last three studies. Because of the relatively small number of Filipino, Native American, and Pacific Islander graduates, it was not statistically possible to derive reliable estimates for those three subgroups given the average sample size of previous studies. Notice from the display that for the University of California, the eligibility rates of African American and Latino graduates are less than half the rate of White and Asian graduates.

DISPLAY 2 Estimated UC and CSU Freshmen Eligibility Rates by Ethnic-Racial Group, 1986, 1990, and 1996

	Asian			African Am.			Latino			White		
<u>UC</u>	1986	1990	1996	1986	1990	1996	1986	1990	1996	1986	1990	1996
<i>Rate</i>	24.9	32.2	30.0	2.3	5.1	2.8	3.1	3.9	3.8	10.1	12.7	12.7
<i>Range</i>	22.3- 27.5	29.8- 34.6	27.6- 32.4	1.2- 3.4	3.4 – 6.8	1.7- 3.9	2.4 – 3.8	3.1 – 4.7	3.0- 4.6	9.4 – 10.8	11.8- 13.7	11.7- 13.7
<u>CSU</u>												
<i>Rate</i>	50.0	61.5	54.4	10.8	18.6	13.2	13.3	17.3	13.4	31.6	38.2	36.3
<i>Range</i>	47.4 52.7	59.2 63.8	52.2 56.6	9.3- 12.3	16.1- 21.1	11.4 15.1	12.2- 14.4	16.1- 18.5	12.4 14.4	30.7 32.5	37.1 39.3	35.2 37.4

If recent reform efforts result in improvements in the eligibility of African American and Latino graduates, then the statewide proportion of graduates eligible to the University of California will likely exceed current Master Plan guidelines in the near future. Because of the enormous amount of state money and resources being directed toward academic

preparation, any observed improvements in student eligibility will probably be interpreted favorably by legislators, rather than interpreted as a call for UC to adjust its admission criteria; especially, since UC admission requirements are already considered to be more demanding and rigorous than those of any public postsecondary system.

**Research design
of recent eligibility
studies**

Each of the Commission's previous studies used a stratified sampling design wherein each public high school represented a non-overlapping stratum. Within each school or stratum, an independent simple random sample was taken such that every graduate, and every possible school sample, had an equal chance of being selected. The statewide proportion of graduates (P^{st}) eligible to attend the CSU and UC was estimated by summing each school's estimate to a state total, and then dividing the sum by the total number of public high school graduates. This is shown mathematically in Display 3. A similar method was used to derive statewide eligibility rates by gender, ethnic-racial group, urbanization, and geographic region.

DISPLAY 3 Estimator of the Statewide Eligibility Proportion P

$$\hat{p}_{st} = \frac{1}{N} (N_1\hat{p}_1 + N_2\hat{p}_2 + \cdots + N_L\hat{p}_L) = \frac{1}{N} \sum_{i=1}^L N_i\hat{p}_i$$

The 1996 study sampled the records of approximately one of every 16 (6.3%) public high school graduates. This generated approximately 16,000 transcripts and enabled the Commission to derive statewide eligibility estimates with a small sampling error (precision level) of approximately plus/minus one percentage point. Eligibility estimates by ethnic-racial group, gender, urbanization, and geographic region were derived with minimal sampling errors ranging from about .50 to 2.50 percentage points.

The actual number of records sampled at each high school varied based on three demographic variables: *urbanization* (rural, urban, suburban), *school size*, and *ethnic representation*. As shown in Display 4, public high schools located in rural areas had a higher sampling rate than those schools located in urban and suburban areas. This permitted the Commission to calculate statistically significant eligibility estimates for students who graduated from rural high schools. Because African Americans were not yet as evenly distributed across the state as other ethnic-racial groups, the 1996 study also used slightly higher sampling rates for public schools where African Americans represented 20 percent or more of the graduating seniors. All school samples, however, were weighted by the size of its graduating class in comparison to the total number of students statewide. This statistical procedure ensured that the 1996 results would produce unbiased eligibility estimates directly comparable to previous studies.

Although there has been considerable interest in deriving eligibility estimates for graduates of California private high schools, the 1996 study did not attempt to do so. This was because in 1990, when the Commission's research design did include private high school graduates, the overall sample size generated was too small to develop reliable eligibility estimates. Although the 2001 study will not include private high school graduates, the eligibility task force will discuss the feasibility of incorporating private graduates in future studies.

Display 4 Final Sampling Rates Used in the 1996 Eligibility Study

School Size/Ethnic Representation	Urbanization	Sampling Rate
<u>100 or Fewer Graduates</u>	Rural	1:8
	Suburban	1:17
	Urban	1:15
<u>101 to 500 Graduates</u>		
5% or Fewer Black Grads	Rural	1:11
	Suburban	1:21
	Urban	1:19
5.01% to 10% Black Grads	Rural	1:10
	Suburban	1:20
	Urban	1:18
10.01% to 20% Black Grads	Rural	1:8
	Suburban	1:17
	Urban	1:15
20.01% or more Black Grads	Rural	1:5
	Suburban	1:9
	Urban	1:9
More than 500 Grads	Rural	1:12
	Suburban	1:24
	Urban	1:21
<u>Statewide Grand Totals</u>	Rural	1:10
	Suburban	1:20
	Urban	1:16

**UC and CSU
freshman admission
requirements
-- 1990 to 1996**

The freshman admission requirements of the California State University and the University of California have three major components: (1) subject-area course requirements, (2) grade-point average scholastic requirements, and (3) examination requirements pertaining to standardized college admission tests. Students have the option of taking either the Scholastic Assessment Test (SAT I) or the American College Test (ACT). In addition, UC freshmen are required to complete three subject-area achievement tests (SAT II). The specific requirements for admission have changed somewhat over time, sometimes in response to eligibility

study findings, and sometimes in response to a need to modify academic standards and expectations.

DISPLAY 5 *1990 and 1996 Freshmen Admission Requirements for California Residents at the California State University and the University of California*

Admission Requirements	California State University		University of California	
	1990	1996	1990	1996
High School Diploma	Yes	Yes	Yes	Yes
Subject Area Requirements (year course)				
a. History	1	1	1	2
b. English	4	4	4	4
c. Mathematics	3	3	3	3
d. Laboratory Science	1	1	1	2
e. Foreign Language	2	2	2	2
f. Advance Course/Electives	3	3	4	2
g. Visual/Performing Arts	1	1	*	*
*Some Visual/Performing Arts courses are approved electives at UC				
Scholarship Requirement – Minimum grade-point average (GPA)	2.0 in all courses	Same	2.78 in “a-f” courses	2.82 in “a-f” course
Examination Requirement	No SAT/ACT required if GPA is 3.0 or better	Same	SAT/ACT and 3 CB Achievement Tests	SAT I/ACT and 3 SAT II
Scholarship/Examination Requirement	GPA between 2.0 and 2.99 with qualifying test scores on State University Eligibility Index	Same	GPA between 2.78 and 3.29 with qualifying test score on University’s Eligibility Index	GPA between 2.82 and 3.29 with qualifying test score on University’s Eligibility Index
Entrance by Examination	None	None	SAT total of 1100 or ACT composite of 27 and Achievement test total of 1650; minimum of 500 on each	SAT I total of 1300 (prior to 4/95) or 1400 or ACT composite of 31 and SAT II total 1650 with 500 minimum on each (prior to 5/95) or 1760 with 530 minimum (after 5/95)

Display 5 outlines the freshman admission requirements for the State University and the University of California that were in effect at the time of the Commission’s 1990 and 1996 eligibility studies. As the display illustrates, the California State University did not implement any changes in its freshman admission requirements over this period. The University of California, however, changed its requirements in several ways:

- ◆ The number of year courses in both History and in Laboratory Sciences was increased from one to two, while the number of college preparatory electives decreased from four to two.
- ◆ The minimum GPA required for admission increased from 2.78 to 2.82 and the University's Eligibility Index, which identifies minimum tests scores for students with GPAs between 2.82 and 3.3, was recalibrated as well.
- ◆ The total SAT I score required for admission by examination alone was also increased.

**University
of California
admissions
requirements
effective 2001
-- resident applicants**

The University of California now has three primary paths to eligibility for resident freshmen applicants—(1) *Eligibility in the Statewide Context*, (2) *Eligibility in the Local Context*, and (3) *Admission by Examination*.

Eligibility in the Statewide Context—Resident Applicants

The admission requirements pertaining to the *Statewide Context* are the same as those shown in Display 5 except for the following: (1) applicants must have a 2.80 minimum grade point average in the A-F required courses; (2) all students are subject to the University's Eligibility Index, which indicates the test score required for a given grade point average; and (3) required test scores associated with the eligibility index are based on a weighted combination of SAT I/ACT scores and SAT II results. Previously, freshmen applicants were only subject to the eligibility index if their grade point average was between 2.82 and 3.3. Also, the index did not incorporate SAT II scores prior to Fall 2001. The University's current Eligibility Index is presented in Display 6.

Beginning in Fall 2003, subject requirements will be expanded to include one unit of coursework in the visual and performing arts, and the number of college preparatory electives required will be reduced from two units to one, so that the total number of subject units required will remain at 15.

Eligibility in the Local Context

In general, this path explicitly recognizes that student academic achievement is tied, in numerous ways, to the level of academic support resources available to students across socioeconomic school districts of the state. Accordingly, the top four percent of college-bound seniors of each high school who complete all course and test requirements will be considered University eligible. More specifically, students must have completed the following 11 academic units by the end of their junior year: (a) one unit of history/social science, (b) three units of English, (c) three units of mathematics, (d) one unit of laboratory science, (e) one unit of foreign language, and (f) and two units chosen from among the other subject requirements. Student's high school ranking will be based on their grade point average in those courses. Although students qualifying for

admission in the local context must complete all test requirements, they are not subject to the University's eligibility index.

Admission by Examination

If students do not meet the requirements for Eligibility in the Statewide Context or Eligibility in the Local Context, they may be able to qualify for admission to the University by examination. To satisfy the minimum requirements for eligibility by examination alone, freshmen applicants must achieve a composite score of 31 or higher on the ACT, or a total score on the SAT I of at least 1,400. In addition, applicants must earn a total score of 1,760 or higher on the three SAT II subject tests with a minimum score of 530 on each test. Recent high school graduates cannot qualify for admission by examination alone if they have completed 12 or more units of transferable coursework at another college or university following high school graduation, or if they have taken transferable college courses in any subject covered by the SAT II: Subject Tests.

Immediate planning tasks related to the 2001 study

Commission staff intends to accomplish the following tasks over the next several months:

- ◆ A Statewide Eligibility Study Task Force will be appointed that will include representation from all systems of education, as well as representatives from the academic senate committees that oversee admission requirements at the State's public universities.
- ◆ A statistical consultant will be hired to assist the task force in developing a valid research and sampling design that will ensure that data obtained are comparable to previous eligibility study findings. The design will need to incorporate UC's new top four percent path to eligibility, referred to as *Admission in the Local Context*.
- ◆ The Commission's Executive Director and the Superintendent of Public Instruction will send a letter later this month to each public high principal and district superintendents announcing the 2001 eligibility study.
- ◆ By midsummer, Commission staff will mail detailed instructions to all public high schools specifying the method to be used to draw a random sample of the records of their 2001 graduates. The letter will be sent to public comprehensive high schools, public adult schools, evening and continuation high schools, and community colleges with high school diploma programs.
- ◆ A range of technical issues will be resolved related to acquiring and processing the statewide sample of transcripts.

Other CPEC staff members will lend support as needed. A progress report will be submitted to the Commission at its October 2001 meeting.

DISPLAY 6 University of California Eligibility Index

University of California Admissions Eligibility Index	
"a-f"	Test Score
GPA	Total
2.80 - 2.84	4640
2.85 - 2.89	4384
2.90 - 2.94	4160
2.95 - 2.99	3984
3.00 - 3.04	3840
3.05 - 3.09	3720
3.10 - 3.14	3616
3.15 - 3.19	3512
3.20 - 3.24	3408
3.25 - 3.29	3320
3.30 - 3.34	3248
3.35 - 3.39	3192
3.40 - 3.44	3152
3.45 - 3.49	3128
≥ 3.50	3120

ACT TO SAT I CONVERSION			
"a-f" Equivalent		"a-f" Equivalent	
ACT Score	SAT I Score	ACT Score	SAT I Score
36	1600	23	1070
35	1580	22	1030
34	1520	21	990
33	1470	20	950
32	1420	19	910
31	1380	18	870
30	1340	17	830
29	1300	16	780
28	1260	15	740
27	1220	14	680
26	1180	13	620
25	1140	12	560
24	1110	11	500

Test Score Total equals: [SAT I composite score] + [2 x (SAT II Writing score + SAT II Mathematics score + third required SAT II score)]. SAT I composite is highest combined mathematics and verbal scores from a single sitting. Highest individual SAT II scores, from any sitting, will be considered. An ACT to SAT I conversion table is provided.